

A LIST OF THE BRACHIOPODA, PELECYPODA, PTEROPODA, AND NUDI-BRANCHIATA OF JAMAICA, LIVING AND FOSSIL.

COMPILED BY T. D. A. COCKERELL.

No list of the bivalve Mollusca of Jamaica has ever been published, and many of the commonest species are unrecorded from the island. The present compilation was prepared during the time I was Curator of the Jamaica Museum, and is, I think, almost as complete as the present state of knowledge will permit. But for the kindness of Mr. H. Vendryes in permitting me the free use of his collections and MSS. the list could never have been prepared, and it is, in the main, a monument of his industry, extending over a great number of years. Mr. Vendryes informed me that the specimens recorded by him might be regarded as correctly identified, as not only has he given them careful study himself, but they were submitted to and verified by Messrs. Swift and Carpenter.

All records are given as I found them, in alphabetical order under each group; synonymy being indicated by cross references.

The solitary nudibranch at the end may serve to remind students that there is a rich but *unknown* nudibranch fauna in the seas around Jamaica.

[Since writing the above, I have submitted the list to Mr. E. A. Smith, who has most kindly indicated some rectifications in the generic nomenclature, and searched some works inaccessible to me, with the result of discovering several additional records. Mr. Smith thinks that a thorough search through the different monographic works, and the older books, would reveal many other records. I regret I have neither time nor opportunity to make this search, but I do not think many *reliable* records would be found. Mr. Smith has discovered seven records (indicated in the list within brackets) which are certainly erroneous, and in the case of easily-recognized species attributed by older authors to Jamaica, but not found there since, I think we may well express some doubt. Specimens of various kinds were frequently brought to me at the Jamaica Museum, which I might easily have supposed Jamaican, without careful inquiry; such specimens would be from Colon principally, but in former days, when Jamaica was on the highway to the Pacific and antipodes, they might have come from more distant

points. Undoubtedly, the marine shells of Jamaica are imperfectly known, but the additions will be made by dredging and such means, and will not be found in such collections as were probably examined by the earlier writers.]

I. BRACHIOPODA.

- Cistella barrettiana*, Dav.: Davidson, Zool. Challenger, 1, p. 22;
Zool. Rec., 1866, p. 212.
woodwardiana, Dav.: Davidson, Zool. Challenger, 1, p. 22;
Zool. Rec. 1866, p. 212.
Discina striata, Lam.: Vendryes Coll., =? antillarum, d'Orb., teste
E. A. Smith.
Terebratula sp. undet.: Barrett, Proc., Geol. Soc., 1866, p. 282.
(foss.).
Terebratulina caputserpentis, L.: Davidson, Zool. Challenger, 1, p.
13.
Thecidium barretti, Woodw.: Davidson, Zool. Challenger, 1, p. 23
(foss. and viv.).
mediterraneum, Risso: Davidson, Zool. Challenger, 1, p. 23.

II. PELECYPODA.

- Anomia ephippium?* L.: Bowden, Vendryes MS. (foss.)=simplex?
simplex, d'Orb.: Vendryes Coll.
Area adamsi, Shuttl.: E. A. Smith, Jr. Linn. Soc., 1890, p. 499.
[*antiquata*, L.: Dillw. Cat. Rec. Shells, but not truly Jamaican, teste E. A. Smith.]
candida, Chem.: Vendryes Coll.
carinifera, Adams: Jay, Cat. Shells, Ed. 1850, teste E. A. Smith.
chemnitzii, Phil.: Vendryes Coll.=? inaequalis.
consobrina, Sby.: Guppy, Geol. Mag., 1874; Ether. in Sawkins, p. 336 (foss.).
deshayesi, Hanley: Vendryes Coll.
domingensis, Lam.: Vendryes Coll.
d'orbigny, Reeve: Vendryes Coll.
imbricata, Brug.: Dillw. Cat. Rec. Shells; Jay Cat. Shells, Ed. 1850, teste E. A. Smith.
inequilateralis, Guppy: Guppy, Geol. Mag., 1874 (foss.).
jamaicensis, Gm.: Turt. Linn., iv, p. 555. =candida.

- listeri*, Phil.: Vendryes Coll (viv.), Bowden, id. (foss.).
noae, L.: Ether. in Sawk., p. 336 (foss.); Vendryes Coll. (viv).
occidentalis, Phil.: Guppy, Geol. Mag., 1874 (foss.); Vendryes Coll. (viv.).
perata, Say: Vendryes Coll.
rhombica, Born: Hunt's Bay, Vendryes Coll.
[*senilis*, Dillw.: Dillw. Cat. Rec. Shells, but recorded in error, teste E. A. Smith.]
tenera, C. B. Ad.: Vendryes MS. Cat.
umbonata, Lam.: Lamk., vi, p. 38.
Asaphis coccinea, Mart.: Vendryes Coll.
Aricula jamaicensis, Dunker: Dunker's orig. descr., teste E. A. Smith (viv. and foss.).
macroptera, Lam.: Vendryes Coll.
radiata, Leach: Vendryes Coll.
Barrettia monilifera, S. P. Woodw.: Ether. in Sawkins, p. 308-310 (foss.)=Hippurites.
Caprina sp. Ether. in Sawkins, p. 308 (foss.).
Caprinella sp. Ether. in Sawkins, p. 308 (foss.).
Cardita ovata, C. B. Ad.: Vendryes MS. Cat.
scabricostata, Guppy: Guppy, Geol. Mag., 1874 (foss.).
Cardium antillarum, d'Orb.: d'Orbigny's orig. descr., teste E. A. Smith.
[*apertum*, Chem.: Jay. Cat. Shells, Ed. 1850, but record erroneous, teste E. A. Smith.]
(*Fulria*) *bullatum*, L.: Vendryes Coll.
? *citrinum*, Chem.: Bowden, Vendryes MS.=*serratum* (foss.).
domingensis, d'Orb.: Vendryes Coll.
? *dominicensis*, Gabb: Bowden, Vendryes MS. (foss.).
elongatum, Brug.: Vendryes Coll.
graniferum, Brod. and Sow.: Vendryes Coll.
haitense, Sby.: Guppy, Geol. Mag., 1874 (foss.).
inconspicuum, Guppy: Guppy, Geol. Mag., 1874 (foss.).
(*Trachicardium*) *isocardia*, L.: North Side, Vendryes Coll.
(*Lericardium*) *lorigatum*, L.: Kingston Harbor, Morant Bay, Vendryes Coll.
lingua-leonis, Guppy: Guppy Geol. Mag., 1874 (foss.)=sub-*elongatum*.
medium, L.: Vendryes Coll.

- muricatum*, L.: Kingston Harbor, Vendryes Coll. (viv.),
Bowden, id. (fo-s.).
- rusticum*, L.: (Lister) Lamk., vi, p. 12.
- serratum* L.: Vendryes Coll.=*laevicardium*, teste E. A. Smith.
- spinosum*, Meuschen.: Vendryes Coll.
- subelongatum*, Sby.: Vendryes Coll.
- Chama arcinella*, Linn.: Guppy, Geol. Mag., 1874 (foss.); Vendryes Coll. (viv.).
- gryphoides*, Linn.: (see Turt. Linn., iv, p. 247).
- involuta*, Guppy: Guppy, Geol. Mag., 1874 (foss.).
- [*lazarus*, L.: Dillw. Cat. Rec. Shells, but record erroneous, teste E. A. Smith.]
- lobata*, Brod.: Vendryes Coll.
- macrophylla*, Chem.: Möreb. Mal. Blätt., 1877, p. 119.
- ruderalis*, Lam.: Bowden, Vendryes MS. (foss.).
- Circe minima*, : Bowden, Vendryes MS. (foss.)? Kingston Harbor, id. (viv.).
- cerina*, C. B. Ads.: Kingston Harbor, Vendryes Coll.
- ? *Coralliophaga* sp. Ether. in Sawkins, p. 323 (foss.).
- Corbula barrattiana*, C. B. Ad.: Contr. Conch., p. 237.
- blandiana*, C. B. Ad.: Contr. Conch., p. 234.
- chittiana*, C. B. Ad.: Contr. Conch., p. 238.
- contracta*, Say: Dall., Bull. 37, U. S. N. M., p. 70.
- cubaniana*, d'Orb.: Dall., Bull. 37, U. S. N. M., p. 70 (viv.; and ? foss.).
- dictiana*, C. B. Ad.: Contr. Conch., p. 235=*tahitensis*.
- disparilis*, d'Orb.: Kingston Harbor, Vendryes Coll.
- kjeriana*, C. B. Ad.: Contr. Conch., p. 237=*caribea*, d'Orb.
- knoriana*, C. B. Ad.: Contr. Conch., p. 238=*cubaniana*.
- krebsiana*, C. B. Ad.: Contr. Conch., p. 234.
- lavalleana*, d'Orb.: Kingston Harbor, Vendryes Coll.
- operculata*, Phil.: Kingston Harbor, Vendryes Coll.
- swiftiana*, C. B. Ad.: Contr. Conch., p. 236=*caribea*.
- tahitensis*, Lam.: Kingston Harbor, Vendryes Coll.
- rieta*, Guppy: Guppy, Geol. Mag., 1874 (foss.)=*disparilis*.
- riminea*, Guppy: Guppy, Geol. Mag., 1874 (foss.)=*Bothrocorbula*.
- Crassatella Marylandica*? Conrad: Vendryes MS. (foss.).
- Crassinella*? *martinicensis*, d'Orb.: Bowden, Vendryes MS.=*Gouldia* (foss.).

- Cuspidaria cleryana*, d'Orb. (Sphena) : orig. descr., teste E. A. Smith.
costellata, Desh. : Guppy, Proc. Geol. Soc., 1866, p. 575 (foss.)
 =? *ornatissima* d'Orb.
- Cytherea carbacea*, Guppy : Guppy, Geol. Mag., 1874 (foss.).
planivieta, Guppy : Guppy, Geol. Mag., 1874 (foss.).
trigonella, Lam. : Vendryes MS. Cat.
affinis, Gmel. : Vendryes Coll.
- Dione*, Gray=Cytherea, subg.
albida, Gmel. : Desh., Cat. Conch. B. Mus., 1 (1853), p. 69.
convexa, Say : Bowden, Vendryes MS. (foss.).
maculata, L. : Vendryes Coll.
- Diplodonta caudeana*? d'Orb : Bowden, Vendryes MS. (foss.).
janeirensis, Rve. : Hunt's Bay, Vendryes Coll.
soror, C. B. Ad. : Dall., Bull. 37, U. S. N. Mus., p. 52.

[To be concluded in next number.]

NOTICES OF NEW CHITONS, I.

BY H. A. PILSBRY.

Meturoplax n. subg. of **Acanthochites**.

Subg. char. :—valves i to vii as in *Acanthochites*, but dorsal (jugular) areas indistinctly differentiated; *valve viii* having the *muero posterior*, the *insertion plate* strongly directed forward, with one slit on each side, and no sinus behind. Girdle as in *Acanthochites*. Type, *A. retrojectus*.

This group holds the same relation to *Acanthochites* that *Pallochiton* holds to *Chatopleura*. It is a variation distinctly in the direction of the *Cryptoplacide*, recalling *Choneplax*, and clearly showing the *Acanthochitoid* genesis of that family.

A. retrojectus n. sp.

Shell small, narrow and elongated, convex, not carinated; black or black-brown, with a whitish "v" or three white stripes on each valve, sometimes broadly maculated with whitish at the sides.

Intermediate valves moderately beaked (except valve ii, the posterior margin of which is straight), sculptured with comparatively coarse, rounded, scattered pustules, which become smaller and more crowded toward the middle, and are lower and less distinct on the ridge, no areas being distinctly differentiated on the valves. End